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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,869	08/27/2003	Masao Maeda	1232-5126	4904
27123	7590	06/30/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			HUFFMAN, JULIAN D	
			ART UNIT	PAPER NUMBER
			2853	
DATE MAILED: 06/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/648,869	MAEDA, MASAO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Julian D. Huffman	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5, 6 and 12-14 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 9, 11, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 7, 8, 10, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 3, 4, 7, 8, 15 and 16 are objected to because of the following informalities:

In claim 3, the limitation "the relative movement amount of said stipulated movement amount n" lacks antecedent basis.

In claim 15, the limitation "the heading amount x" lacks antecedent basis.

In claim 4, line 14, it is respectfully suggested that the word "a" be inserted before the word "direction".

In claim 7, last line, it is respectfully suggested that the last line be replaced with "the paper feed port which is used".

A similar correction is suggested for claim 15.

In claim 8, the last line, it is respectfully suggested that the language "to-be-" be omitted.

A similar correction is suggested for claim 16.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. 101 (See MPEP 2106 IV B 1 a).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, 9, 11, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Otsuki (U.S. 6,517,267 B1).

Otsuki discloses the following:

With regards to claims 1 and 9, a recording apparatus (fig. 1) and a recording method, which performs recording on a recording medium (P) while repeating a main scanning operation of record-scanning with a recording head (36) having a plurality of recording elements arrayed in a predetermined direction (fig. 3), in a main scanning direction substantially orthogonal to the predetermined direction, and a sub scanning operation of relatively moving the recording head and the recording medium in a sub scanning direction orthogonal to the main scanning direction, comprising:

shift means (fig. 8, element 330) capable of/step of shifting, by a magnitude corresponding to a designated number of the recording elements, recording data stored in a buffer memory (fig. 2, element 50), and then transferring the recording data to said recording head; and

control means (fig. 2, element 54) for/ step of controlling said shift means/step so that, in a case where a region which cannot be record-scanned by said recording head exists in a region near an end part of said recording medium in the sub scanning direction (column 12, line 66-column 13, line 1), and where a relative position of said recording head and said recording medium in said sub scanning direction cannot be renewed, said recording data to be transferred to said recording head may be shifted by said shift means onto a side of the region which cannot be record-scanned in said sub scanning direction (fig. 13a, recording data is shifted onto a side of the region which cannot be record-scanned, as the recording data is shifted downward in the process of printing a pass, subscanning and printing subsequent passes).

With regards to claims 3 and 11, after said recording

medium has become incapable of the relative movement of said stipulated movement amount  $n$  at a rear end of said recording medium in said sub scanning direction (fig. 13a), said control means controls said shift means/ said control step proceeds;

so that, before a difference between an accumulative value obtained by accumulating a stipulated movement amount  $n$  from zero every record-scanning from a head of said recording medium and a movement execution amount from the head of said recording medium exceeds the number  $N$  of the recording elements of said recording head, such record-scannings may be repeated by shifting said recording data onto a side of the region which cannot be record-scanned in said sub scanning direction in correspondence with the difference between the accumulative value and the movement execution amount by said shift means (The language of claims 3 and 11 relates to the difference calculated between the counters  $Y1$  and  $Y2$ , which is then compared to the number of recording elements  $N$ . The value  $Y1$  represents the initial amount that the recording media is advanced. This movement amount is the product of the reverse feeding, and the limited amount which the medium can be reverse fed due to the restrictions in layout inside the printer. The value  $Y2$  is initially set to 0 and thereafter incremented by a stipulated feed amount. The language of claims 3 and 11, describes that, before a given set of conditions is satisfied, the conditions being the difference between the accumulative value and the movement execution amount exceeding the number  $N$  of the record elements, the device will shift the recording data onto a side which cannot be record scanned. The claim language does not specify that

the values are calculated, rather, the claim language is concerned with whether the conditions are satisfied. The Otsuki reference shifts the recording data onto a side which cannot be record scanned and does this throughout the entire process of printing on the top of the media (fig. 13). In Otsuki the stipulated movement amount is 4 nozzles (fig. 13b) and the recording head is initially located 3 nozzles from the top of the medium (fig. 13a). The difference is therefore less than the total number of nozzles, 4 (fig. 13b) As such, Otsuki discloses claims 3 and 11).

With regards to claims 17 and 18, a computer-readable medium storing a control program for performing the above operations (column 16, line 46).

#### ***Allowable Subject Matter***

6. Claims 5, 6 and 12-14 are allowed.

Claims 4 and 7 would be allowable if rewritten to overcome the objection outlined above.

Claims 2, 8, 10, 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome any objections outlined above *and* in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 9:30a.m.-6:00p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JH  
24 June 2005

  
**K. FEGGINS**  
**PRIMARY EXAMINER**